

STATE OF MINNESOTA
OFFICE OF ADMINISTRATIVE HEARINGS
FOR THE MINNESOTA POLLUTION CONTROL AGENCY

In the Matter of the Proposed Amendments
to Rules Governing Waste Combustor
Permits, and the Standards of Performance
of Waste Combustors. Minn. Rules
Chapters 7001 and 7011.

**REPORT OF THE
ADMINISTRATIVE LAW JUDGE**

The above entitled matter came on for hearing before Administrative Law Judge Allan W. Klein on January 21, 1998, in Saint Paul, Minnesota.

This Report is part of a rulemaking proceeding held pursuant to Minn. Stat. §§ 14.31 to 14.20 (1996), to hear public comment, to determine whether the Minnesota Pollution Control Agency (hereafter "the Agency" or "the MPCA") has fulfilled all relevant substantive and procedural requirements of the law applicable to the adoption of the rules, whether the proposed rules are needed and reasonable, and whether or not modifications to the rules proposed by the Department after initial publication are impermissible, substantial changes.

Kathleen L. Winters, Assistant Attorney General, 445 Minnesota Street, St. Paul, Minnesota 55101-2127, appeared on behalf of the MPCA at the hearing. The MPCA's hearing panel consisted of Anne Jackson, Principal Engineer in the MPCA's Air Quality Division, and Susan Mitchell, Senior Pollution Control Specialist in the Program Development Section of the MPCA's Air Quality Division.

Approximately 25 persons attended the hearing. Fifteen persons signed the hearing register. The hearing continued until all interested persons, groups or associations had an opportunity to be heard concerning the proposed amendments to these rules.

The record remained open for the submission of written comments for eight working days following the hearing to February 2, 1998. During the initial comment period the ALJ received written comments from interested persons and the agency. One comment with new information was filed after the comment period closed and was not considered. Pursuant to Minn. Stat. § 14.15, subd. 1, five working days were allowed for the filing of responsive comments. During the responsive comment period the agency submitted comments replying to the written comments submitted during the

initial comment period and making changes to the proposed rule. The record closed on February 9, 1998.

NOTICE

This Report must be available for review to all affected individuals upon request for at least five working days before the agency takes any further action on the rule(s). The agency may then adopt a final rule or modify or withdraw its proposed rule. If the Department makes changes in the rule other than those recommended in this report, it must submit the rule with the complete hearing record to the Chief Administrative Law Judge for a review of the changes prior to final adoption. Upon adoption of a final rule, the agency must submit it to the Revisor of Statutes for a review of the form of the rule. The agency must also give notice to all persons who requested to be informed when the rule is adopted and filed with the Secretary of State.

Based upon all the testimony, exhibits, and written comments, the Administrative Law Judge makes the following:

FINDINGS OF FACT

Procedural Requirements.

1. On October 15, 1997, the MPCA requested the scheduling of a tentative hearing date and filed the following documents with the Chief Administrative Law Judge:

- (a) a copy of the proposed rules certified by the Revisor of Statutes;
- (b) the Dual Notice of Hearing proposed to be issued; and
- (c) a draft of the Statement of Need and Reasonableness (SONAR).

2. On November 13, 1997, the MPCA mailed the Dual Notice of Hearing to all persons and associations who had registered their names with the agency for the purpose of receiving such notice. Exhibit 7. A copy of the SONAR was mailed on that date to the Legislative Reference Librarian. Exhibit 4. The MPCA gave discretionary notice to all listed municipal waste combustor operators in Minnesota, all listed wood finishers in Minnesota, County solid waste officers in Minnesota, industrial waste boilers and consultants, and all Minnesota hospitals. A news release was distributed to media outlets. Exhibit 6. Chairs of the House and Senate Environment and Natural Resources Committees received copies of the Dual Notice and SONAR. *Id.* Notice of the rulemaking and the contents of the Dual Notice were posted on the MPCA website at <http://www.pca.state.mn.us>. Exhibit 5c.

3. On November 17, 1997, a copy of the proposed rules and the Notice of Hearing were published at 22 State Register 741.

4. On the day of the hearing, the Department placed the following additional documents into the record:

- (a) the Notice of Hearing as mailed (Exhibit 5);
- (b) the Department's Certificate of Mailing and certification of providing additional notice (Exhibit 6);
- (c) certification of the mailing list as accurate and complete (Exhibit 7);
- (d) a copy of the letter transmitting the SONAR the Legislative Reference Librarian (Exhibit 4);
- (e) all written comments received by the MPCA before the hearing (Exhibit 9);
- (f) a Request for Comments published at 20 State Register 2384 (Exhibit 1);
- (g) the SONAR (Exhibit 2);
- (h) the comment with 27 signatures requesting a hearing be held on the proposed rule (Exhibit 8);
- (i) the Notice of Hearing sent to commentators who requested a hearing (Exhibit 10);
- (j) the Certificate of Mailing a Notice of Hearing to commentators who requested a hearing (Exhibit 11);
- (k) changes to the language of the rules as proposed in the State Register (Exhibit 12);
- (l) a Supplemental SONAR explaining the changes to the proposed rules and responding to comments (Exhibit 13); and
- (m) a summary of the testimony of the agency's witnesses (Exhibits 14-15).

Nature of the Proposed Rules.

5. This rulemaking procedure involves amendments to the MPCA's waste combustor rules. Those rules were adopted in 1994 to establish standards of operation and testing for facilities that incinerate waste. ***In the Matter of Proposed Amendments to Permanent Rules Governing Combustor Permits and Standards of Performance for Waste Combustors***, OAH Docket No. 69-2200-8223-1 (Report issued February, 1994). In 1995, the U.S. Environmental Protection Agency (EPA) adopted air quality standards for municipal waste combustors (MWCs) that were more stringent than Minnesota's rules. 60 FR 65382 (December 19, 1995)(codified at 40 C.F.R. Pt. 60). As the MPCA states in its SONAR,

These revised [federal] standards require that Minnesota also revise its state standards because the 1994 Minnesota standards are not as stringent as the 1995 EPA standards. The proposed amendments to the Minnesota rule for existing MWCs impose emission limits, operating requirements, and monitoring, recordkeeping and reporting requirements in line with the new federal standards. The proposed rule incorporates standards of performance for existing MWCs and incorporates by reference the new source performance standards (NSPS) for new MWCs.

SONAR, at 1.

6. The new federal standards were adopted on December 19, 1995. SONAR, at 6. Imposition of these new standards was delayed by a lawsuit brought by small waste combustors. ***Davis County Solid Waste Management v. EPA***, 101 F.3d 1395 (D.C. Cir. December 6, 1996). After originally vacating the EPA regulations, those regulations were reinstated with respect to MWCs. ***Davis County***, 108 F.3d 1454 (D.C. Cir. March 21, 1997). This change in position requires the MPCA to either adopt changes to its waste combustor rules or have the EPA impose its own regulations in this area. The MPCA described the regulatory process as:

Section 129(b) (2) of the CAA [Clean Air Act, 42 U.S.C. § 7429 (1994)], which is specific to MWCs, requires that states submit to EPA a plan to implement and enforce the promulgated federal regulations for existing MWCs. Section 129 (b)(2) requires that the state plan shall be at least as protective as the federal standards, and also requires that each MWC unit that is subject to the federal standards be in compliance with the standards within three years after the state plan is approved by EPA. If a state does not submit a plan within the two years following the promulgation of the federal standards, Sec. 129 (b)(3) requires EPA to develop, implement and enforce a plan of its own to bring into compliance any operating MWC subject to the federal standards.

SONAR, at 5.

Statutory Authority

7. The MPCA cites Minn. Stat. § 116.07, subd. 4 (1996), as the source of the agency's authority to adopt rules governing MWCs. SONAR, at 3. That subdivision states:

Pursuant and subject to the provisions of chapter 14, and the provisions hereof, the pollution control agency may adopt, amend and rescind rules and standards having the force of law relating to any purpose within the provisions of Laws 1967, chapter 882, for the prevention, abatement, or control of air pollution. Any such rule or standard may be of general application throughout the state, or may be limited as to times, places, circumstances, or conditions in order to make due allowance for variations therein.

Without limitation, rules or standards may relate to sources or emissions of air contamination or air pollution, to the quality or composition of such emissions, or to the quality of or composition of the ambient air or outdoor atmosphere or to any other matter relevant to the prevention, abatement, or control of air pollution.

Pursuant and subject to the provisions of chapter 14, and the provisions hereof, the pollution control agency may adopt, amend, and rescind rules and standards having the force of law relating to any purpose within the provisions of Laws 1969, chapter 1046, for the collection, transportation, storage, processing, and disposal of solid waste and the prevention, abatement, or control of water, air, and land pollution which may be related thereto, and the deposit in or on land of any other material that may tend to cause pollution.

Minn. Stat. § 116.07, subd. 4 (1996).

8. MWCs are designed to dispose of municipal solid waste, while extracting energy from the disposal process. A byproduct of this disposal method is air pollution. The Administrative Law Judge finds that the Department has the statutory authority to adopt the proposed rule amendments.

Rulemaking Legal Standards.

9. Under Minn. Stat. § 14.14, subd. 2, and Minn. Rule 1400.2100, one of the determinations which must be made in a rulemaking proceeding is whether the agency has established the need for and reasonableness of the proposed rule by an affirmative presentation of facts. In support of a rule, the Department may rely on legislative facts, namely general facts concerning questions of law, policy and discretion, or it may simply rely on interpretation of a statute, or stated policy preferences. *Manufactured Housing Institute v. Pettersen*, 347 N.W.2d 238, 244 (Minn. 1984); *Mammenga v. Department of Human Services*, 442 N.W.2d 786 (Minn. 1989). The Department prepared a Statement of Need and Reasonableness ("SONAR") in support of the amendments of the rule. At the hearing, the Department primarily relied upon the SONAR as its affirmative presentation of need and reasonableness for the proposed amendments. The SONAR was supplemented by comments made by the Department at the public hearing and in its written posthearing comments.

The question of whether a rule has been shown to be reasonable focuses on whether it has been shown to have a rational basis, or whether it is arbitrary, based upon the rulemaking record. Minnesota case law has equated an unreasonable rule with an arbitrary rule. *In re Hanson*, 275 N.W.2d 790 (Minn. 1978); *Hurley v. Chaffee*, 231 Minn. 362, 367, 43 N.W.2d 281, 284 (1950). Arbitrary or unreasonable agency action is action without consideration and in disregard of the facts and circumstances of the case. *Greenhill v. Bailey*, 519 F.2d 5, 19 (8th Cir. 1975). A rule is generally found to be reasonable if it is rationally related to the end sought to be achieved by the governing statute. *Mammenga*, 442 N.W.2d at 789-90; *Broen Memorial Home v. Minnesota Department of Human Services*, 364 N.W.2d 436, 444 (Minn. Ct. App. 1985). The Minnesota Supreme Court has further defined the Department's burden in adopting rules by requiring it to "explain on what evidence it is relying and how the evidence connects rationally with the agency's choice of action to be taken."

Manufactured Housing Institute, 347 N.W.2d at 244. The Department is entitled to make choices between possible approaches as long as the choice it makes is rational. Generally, it is not the proper role of the Administrative Law Judge to determine which policy alternative presents the "best" approach since this would invade the policy-making discretion of the Department. The question is rather whether the choice made by the Department is one a rational person could have made. ***Federal Security Administrator v. Quaker Oats Company***, 318 U.S. 218, 233 (1943).

In addition to need and reasonableness, the Administrative Law Judge must also assess whether the rule adoption procedure was complied with, whether the rule grants undue discretion, whether the Department has statutory authority to adopt the rule, whether the rule is unconstitutional or illegal, whether the rule constitutes an undue delegation of authority to another entity, or whether the proposed language is not a rule. Minn. Rule 1400.2100.

In this matter, changes have been proposed to the rule after publication of the rule language in the State Register. Therefore, the Administrative Law Judge must determine if the new language is substantially different from that which was originally proposed. Minn. Stat. § 14.15, subd. 3 (1996). The standards to determine if the new language is substantially different are found in Minn. Stat. § 14.05, subd. 2 (1996).

Impact on Farming Operations.

10. Minn. Stat. § 14.111, (1996), imposes an additional notice requirement when rules are proposed that affect farming operations. The MPCA expressed its opinion on the rules' impact as follows:

They will have no effect on agricultural lands or farming operations, except to the extent that better emission control protects farmland from contamination

SONAR, at 101.

The Administrative Law Judge finds that the proposed rule change will not impact farming operations in Minnesota, and finds that no additional notice is required.

Classes of Persons Affected by the Proposed Rules

11. Minn. Stat. § 14.131 requires an agency adopting rules to include in its SONAR:

(1) a description of the classes of persons who probably will be affected by the proposed rule, including classes that will bear the costs of the proposed rule and classes that will benefit from the proposed rule;

(2) the probable costs to the agency and to any other agency of the implementation and enforcement of the proposed rule and any anticipated effect on state revenues;

(3) a determination of whether there are less costly methods or less intrusive methods for achieving the purpose of the proposed rule;

(4) a description of any alternative methods for achieving the purpose of the proposed rule that were seriously considered by the agency and the reasons why they were rejected in favor of the proposed rule;

(5) the probable costs of complying with the proposed rule; and

(6) an assessment of any differences between the proposed rule and existing federal regulations and a specific analysis of the need for and reasonableness of each difference.

In its SONAR, the MPCA included its analysis performed to meet the requirements of this statute. The MPCA noted the anticipated costs to operators of waste combusters, its own costs in administering the rule, the agency's reasoning as to why less costly methods are not available, why no alternatives will accomplish the goals of the rules, and the manner in which applicable federal regulations were being incorporated into these rules. SONAR, at 95-100. The MPCA has met the statutory requirements for assessing the impact of the proposed rules.

Analysis of the Proposed Rules.

General.

12. This Report is limited to the discussion of the portions of the proposed rule amendments that received significant critical comment or otherwise need to be examined. Accordingly, the Report will not discuss each comment or rule part. Persons or groups who do not find their particular comments referenced in this report should know that each and every suggestion has been carefully read and considered. Moreover, because some sections of the proposed rules were not opposed and were adequately supported by the SONAR, a detailed discussion of each section of the proposed rules is unnecessary. The Administrative Law Judge specifically finds that the Department has demonstrated the need for and reasonableness of the provisions of the amended rules that are not discussed in this report by an affirmative presentation of the facts, that such provisions are specifically authorized by statute, and that there are no other problems that prevent their adoption.

Furthermore, where changes were made to the rule after publication in the State Register, the Administrative Law Judge must determine if the new language is substantially different from that which was originally proposed. Minn. Stat § 14.05,

subd. 3. The Standards to determine if the new language is substantially different from that which was originally proposed by the Department are found in Minn. Stat. § 14.05, subd. 2. Any language proposed by the Department which differs from the rules as published in the State Register and is not discussed in this report is found not to constitute a substantially different rule.

Rule-by-Rule Discussion.

13. The comments received by letters and at the public hearing focused on the proposed amendments to testing requirements, modifications to the definition of waste combustors, and standards for certification of facility operators. Each portion of the proposed rule amendments regarding these areas will be discussed on individually.

7007.0801 - Conditions for Air Emission Permits for Waste Combustors

14. The MPCA has proposed to modify subpart 1 of Minn. R. 7007.0801 to require the same or stricter limits (as in the applicant's existing permit) on mercury emissions, absent good cause shown by the permit applicant for a less stringent emission limit on mercury. Subparts 2 and 3 impose a requirement for operating conditions for waste combustors emitting less than 50 percent of the allowable standard for mercury. The modifications were made to incorporate the standards set out in Minn. Stat. § 116.85 (1996), which states:

116.85 Monitors required for other incinerators.

Subdivision 1. Emission monitors. Notwithstanding any other law to the contrary, an incinerator permit that contains emission limits for dioxin, cadmium, chromium, lead, or mercury must, as a condition of the permit, require the installation of an air emission monitoring system approved by the commissioner. The monitoring system must provide continuous measurements to ensure optimum combustion efficiency for the purpose of ensuring optimum dioxin destruction. The system shall also be capable of providing a permanent record of monitored emissions that will be available upon request to the commissioner and the general public. The commissioner shall provide periodic inspection of the monitoring system to determine its continued accuracy.

Subd. 1a. Mercury testing. (a) Notwithstanding any other law to the contrary, a facility holding an incinerator permit that contains emission limits for mercury must, as a condition of the permit, conduct periodic stack testing for mercury as described by this subdivision. Hospital waste incinerators having a design capacity of less than 3,000,000 BTUs per hour may use mercury segregation practices as an alternative to stack testing if allowed by applicable federal requirements, with the approval of the commissioner.

(b) A facility shall conduct stack testing for mercury at intervals not to exceed three months. An incinerator facility burning greater than 30 percent by weight of refuse-derived fuel must conduct periodic stack testing for mercury at intervals not to exceed 12 months unless a previous test showed a permit exceedance after which the agency may require quarterly testing until permit requirements are satisfied. With the approval of the commissioner, an incinerator facility may use methods other than stack testing for determining mercury in air emissions.

(c) After demonstrating that mercury emissions have been below 50 percent of the facility's permitted mercury limit for three consecutive years, as tested under the conditions of paragraph (b), an incinerator facility may choose to conduct stack testing once every three years or according to applicable federal requirements, whichever is more stringent. The facility shall notify the commissioner of its alternative mercury testing schedule, and the commissioner shall include operating conditions in the facility's permit that ensure that the facility will continue to emit mercury emissions less than 50 percent of the applicable standard.

(d) If a test conducted under the provisions of paragraph (c) shows mercury emissions greater than 50 percent of the facility's permitted mercury limit, the facility shall conduct annual mercury stack sampling until emissions are below 50 percent of the facility's permitted mercury limit. Once the facility demonstrates that mercury emissions are again below 50 percent of the facility's permitted mercury limit, the facility may resume testing every three years or according to federal requirements, whichever is more stringent, upon notifying the commissioner.

(e) In amending, modifying, or reissuing a facility's air emissions permit which contains a provision that restricts mercury emissions from the facility the commissioner shall, at a minimum, continue that permit restriction at the same level unless the applicant demonstrates that no good cause exists to do so.

Subd. 2. Continuously monitored emissions. Should, at any time after normal startup, the permitted facility's continuously monitored emissions exceed permit requirements, based on accurate and valid emissions data, the facility shall immediately report the exceedance to the commissioner and immediately either commence appropriate modifications to the facility to ensure its ability to meet permitted requirements or commence shutdown if the modifications cannot be completed within 72 hours. Compliance with permit requirements must then be demonstrated based on additional testing.

Subd. 3. Periodically tested emissions. Should, at any time after normal startup, the permitted facility's periodically tested emissions

exceed permit requirements based on accurate and valid emissions data, the facility shall immediately report the exceedance to the commissioner, and the commissioner shall direct the facility to commence appropriate modifications to the facility to ensure its ability to meet permitted requirements within 30 days, or to commence appropriate testing for a maximum of 30 days to ensure compliance with applicable permit limits. If the commissioner determines that compliance has not been achieved after 30 days, then the facility shall shut down until compliance with permit requirements is demonstrated based on additional testing.

Subd. 4. Other law. This section shall not be construed to limit the authority of the agency to regulate incinerator operations under any other law.

15. Leslie Davis of Earth Protector, Inc. (Earth Protector) suggested that demonstrated emissions levels should become the permitted levels, rather than setting permitted levels higher and then allowing waste combustors to exceed the demonstrated levels without penalty. T. at 35. The regulatory scheme imposed by Minn. Stat. § 116.85 provides an incentive to waste combustors, through relaxed testing schedules, to maintain emissions at one-half or less of the allowable levels. The statute assumes that permitted levels will be higher than demonstrated levels. The MPCA cannot impose a more stringent restriction on waste combustors than that imposed by Minnesota Statutes unless such a restriction is required by some other law. See Minn. Stat. § 116.85, subd. 4. No such other law has been identified. The MPCA proposed to modify the testing standard in subpart 2 to delete a reference to annual testing. The deletion is needed to conform the proposed rule with other rule provisions requiring testing be done at less than one year intervals. Supplemental SONAR, at 2. Proposed rule 7001.0801 is needed and reasonable, as modified. The new language is not substantially different from the rule as originally proposed.

7011.0551 - Conditions for Air Emission Permits for Waste Combustors

16. As originally proposed, M. R. 7011.0551 was to be amended to include combustors of industrial solid waste, in addition to mixed municipal solid waste and refuse-derived fuel (RDF). As the rulemaking proceeded, comments were received by the MPCA that suggested the proposed treatment of industrial solid waste was more complicated than originally thought. Supplemental SONAR, at 2-3. These comments caused the MPCA to reconsider the propriety of including industrial solid waste in the combustor rules. *Id.* Based on this reconsideration, the MPCA decided to withdraw the proposed language including industrial solid waste throughout the rules. The withdrawal does not render the proposed rules unreasonable. The withdrawal does not constitute substantially different rules from those originally published in the State Register. These findings of need, reasonableness, and no substantial difference apply to each part of the rules where the language is withdrawn.

7011.0121 - Definitions

17. The definition of “Class A waste combustor” was originally adopted as the combined design capacity of combustors at a site at a certain thermal output per hour (Btu/hr). The federal standard was since changed to define very large and large MWCs in the same category. The language in subpart 9 was originally adopted in 1994 to parallel the federal classification system. The MPCA noted that the recently adopted federal definition is by combustor, not combined capacity. Supplemental SONAR, at 13. For these reasons, the MPCA is modifying the language in subpart 9 to conform to the federal standard. Subpart 9 is needed and reasonable as modified. The new language is not substantially different from the language first proposed.

18. The Minnesota Resource Recovery Association (MRRA) objected to retaining the language in subpart 11 defining Class C waste combustors as “the total of the design capacity of for all waste combustor units at a stationary source.” Exhibit 9f. Since the litigation in **Davis County** was founded on that language, the MRRA suggested that the subpart be changed to accommodate the alleged problems of the EPA’s federal rule. *Id.* The issue raised by MRRA has not been finally decided in the federal litigation. Until the EPA has finally resolved the question, adopting a different definition from the federal standard is likely to create a problem, not solve one. Subpart 11 is needed and reasonable as proposed.

19. Subpart 32 defines “maximum demonstrated capacity” for waste combustors. The existing test measured the average of dioxins produced in three test runs. SONAR, at 15. The proposed rule further limits maximum capacity to that used in a single four-hour test run that complies with the dioxin limits. The result of the proposed language is to prevent averaging test runs to meet the standard, even when one test demonstrates the combustor exceeds the allowable emission of dioxins. The proposed rule is needed and reasonable, as proposed.

20. Michelle Swanson, Senior Environmental Analyst for Northern States Power (NSP), suggested that the rules define what was meant by “one hour average” for the purpose of the testing standards. Exhibit 9. The MPCA responded by proposing subpart 34a, defining “one hour average” as the arithmetic mean of data points monitored over one hour. The subpart also specified that the hour must begin and end at the top of the hour. This language specifies the beginning and ending of the hour to provide additional protection against manipulation of data by “adjusting” when an hour’s worth of data begins and ends. The proposed rule is needed and reasonable. The new language does not constitute a substantial difference from the rules as originally proposed.

21. Subpart 46 defines “waste combustor” for the purposes of the rule. The MPCA originally proposed to delete a reference to combustion devices burning “primarily wood” from the definition. The Louisiana-Pacific Corporation, Minnesota Power, and Trus Joist MacMillan urged the phrase be retained to allow treated wood to be used as fuel. Exhibits 9b, 9c, 9e, and 9h. The MPCA noted that these commentators were burning treated wood, such as oriented strandboard, laminates,

and treated wood, when the definition of “wood” in the rules is untreated wood. Supplemental SONAR, at 4. The MPCA responded to the uncertainty over what emissions are produced from some treated wood combustion by withdrawing the deletion of “primarily wood” from the proposed rule. *Id.* at 5. The agency anticipates addressing this issue in the next phase of the combustor rules. *Id.* Withdrawing the amendment is needed and reasonable and not a substantial change.

7011.1205 - Incorporation by Reference

22. The EPA suggested that the most recent Standards for the Qualification and Certification of Resource Recovery Facility Operators, ASME QRO-1-1994, be incorporated into the rule. The MPCA agreed and made that change throughout the rule. The rule, as modified is needed and reasonable and does not constitute a substantially different rule.

7011.1215 - Applicability of Standards of Performance for Waste Combustors

23. Due to the removal of “industrial solid waste” from the rule, the MPCA has withdrawn proposed subpart 2b of Minn. R. 7011.1215, that would have further designated what rules applied to burning such waste and from what rules the activity would have been exempt. In its place, the MPCA proposed a totally new subpart 2b to allow NSP to continue its practice of burning oily rags in coal-fired burners. Supplemental SONAR, at 6. The effect of these two changes is to continue the existing practices of the MPCA in both the areas of industrial solid waste and co-fired units. *Id.* A further modification was made to respond to EPA's request for clarification as to what wastes were allowed to be burned. MPCA Reply, at 2. Subpart 2b is needed and reasonable as modified and does not constitute a substantially different rule.

24. Subpart 4 indicates when the standards for emissions by operating waste combustors apply. Specifically, start-up, shut down, and malfunctions, when those periods do not exceed three hours, are not held to the same standards as normal operation. Those periods are recognized in the federal standards as being less efficient in combusting waste. SONAR, at 24. Conforming to the federal standards is needed and reasonable.

25. Subpart 5 establishes the period for Class A waste combustors to reach compliance with the standards being imposed by these amended rules. The MPCA noted that federal regulations imposed the requirement of compliance within one year of approval of the state plan. SONAR, at 25. The MPCA is proposing compliance with these rules be required within sixty days of the rules' adoption. *Id.* at 24-25. The agency notes that all four of the existing Class A facilities have been modifying their facilities in anticipation of these rules. *Id.* at 25. In addition, any Class A operator can submit a schedule for compliance that extends the full compliance date beyond sixty days, but no later than December 19, 2000. The subpart is needed and reasonable, as proposed.

7011.1225 - Standards of Performance for Waste Combustors

26. Minn. R. 7011.1225, subpart 1.A. is being modified in this proceeding to replace the listing of the gases subject to emission limits with a reference to the listings adopted in other parts of the rule. This is needed to retain readability of the rule since the specific emission standards are being adjusted based on the type of combustion method used. Subpart 1.B. is being added to introduce a standard on visible emissions of combustion ash outside of buildings or enclosures. The MPCA notes that these standards are consistent with the EPA standards on emissions, including the emissions of combustion ash. SONAR, at 31-32. There were no specific comments about the emissions levels being allowed under these rules, primarily due to the recognition that the rules are being amended to comply with more stringent federal emission standards.

7011.1228 - Nitrogen Oxides Limits for Class A Waste Combustors

27. Proposed rule 7011.1288 sets emission limits for nitrogen oxides (NO_x) for Class A combustors. As with the listing of emissions standards in proposed rule 7011.1227, different standards for NO_x emissions are proposed for different combustion methods. The EPA noted that the NO_x standard for mass burn rotary waterwall combustors had been omitted. While there are no Class A combustors using that method in Minnesota, it is needed and reasonable to add the standard to part 7011.1228. The rule, as modified by the MPCA, is needed and reasonable, and not substantially different from the rules as proposed.

7011.1240 - Operating Requirements

28. Minn. R. 7011.1240 sets the standards for operators of waste combustors. The MPCA is amending the rule part to include the new federal requirement for certification of operators. SONAR, at 53. The originally published rule provided a transition period that required chief facility operators, shift supervisor and control room operators to achieve full certification. Rob Dunnette, Plant Manager of the Olmstead Waste-to-Energy Facility (Olmstead), supported the requirement of certification, and noted that most combustor operators already had the required certification. But both MRRA and Olmstead urged the rule be amended to allow for a one-year transition period to allow uncertified control room operators to meet the certification requirement. MRRA and Olmstead noted that the certification program was only offered once in the spring and once in the fall. The MPCA agreed with the comments and amended the rule to add a one-year transition period for control room operators. The rule part, as modified, is needed and reasonable. The new language is not substantially different from the rule as originally published.

7011.1260 - Continuous Monitoring

29. The control of emissions from waste combustors is accomplished in several different ways. One is the operation of a waste combustor according to its design parameters. Minn. R. 7011.1260 requires monitoring of aspects of waste

combustion operation to determine if a waste combustor is within its allowable emission levels. Subpart 1 requires temperature monitoring of waste combustion. The MPCA is amending the part to require such monitoring only of smaller waste combustors (Class D, III, or IV) because such monitoring is expensive and not relevant to the emissions produced by Class A waste combustors. SONAR at 58-59. For the smaller combustors, the MPCA maintains that “combustion chamber temperature is the key operating parameter . . .” *Id.* at 59. Removal of the requirement from Class A combustors is needed and reasonable.

30. Subpart 2 added “calibrate” and “maintain” to the obligations of a waste combustor operator regarding particulate matter temperature control monitors. The EPA suggested adding those standards to the requirements for continuous monitors on waste combustors. The MPCA added that language.

31. The requirement in subpart 3.A.4., to monitor for oxygen and carbon dioxide emissions, was proposed for amendment to specify that such monitoring is required at each location where CO, SO₂, and NO_x are monitored. This specificity incorporates into the rule the federal standard for monitoring (40 C.F.R. 60.58b(b)). Subpart 3 is needed and reasonable, as amended. The new language is not substantially different from the rule as originally published.

32. The MPCA also added a methodology for collecting and compiling data from the temperature monitoring to subpart 4.A. The item requires a four-hour average of one-hour samples, each consisting of ten specific measurements. The MPCA added “consecutive” to clarify when the one-hour samples are to be collected. In items C, D and E, the MPCA specified that only two data points are required during calibration, audits, or maintenance. The MPCA also added subpart 4a, to require the use of Method 19 (40 C.F.R. pt. 60, Appendix A) to calculate emissions of SO₂ and NO_x. The rule changes incorporate federal standards and are needed and reasonable. The new language is not substantially different from the rules as published.

33. Subpart 5 sets out the general rule, that waste combustor continuous monitoring must comply with Minn. R. 7001.1000, and sets out specific exceptions to that general rule. The EPA noted that item D contained the option for operators to obtain approval from the Commissioner of the MPCA for other monitoring or data collection systems. The EPA pointed out that such authority had not been delegated to the Commissioner from the EPA and intimated that the rule language could result in Minnesota’s state plan not being approved. The MPCA amended the subpart to limit the alternative monitoring methods to waste combustors other than Class A combustors. With the modification, subpart 5 is needed and reasonable. The modified language is not substantially different from the rules as published.

7011.1265 - Required Performance Tests, Methods, and Procedures

34. Minn. R. 7011.1265 sets out the methodologies required of waste combustor operators in testing the performance level achieved in various areas by

combustors while operating. In this part, references to repealed rules are replaced, federal standards are incorporated, and redundant rules are repealed. The EPA pointed out that the reference to Method 5 (40 C.F.R. pt. 60, Appendix A) in subpart 2 required the addition of temperature control for gases in accordance with the requirements of 40 C.F.R. 60.58b(c)(3). The MPCA amended the subpart accordingly. The modified rule is needed and reasonable. The new language does not render the rule substantially different from the rules as published.

35. Method 29 (40 C.F.R. pt. 60, Appendix A) is incorporated into the waste combustor testing regime for mercury, lead, and cadmium by subpart 3, items C and D. All three elements are metals which cause environmental and health hazards when introduced into the environment through combustion. Olmstead suggested that, while Method 29 was appropriate, the two-hour maximum time limit imposed by items C and D was an unwarranted restriction on the federal test method. James F. Eggen, Manager of Environmental Services for United Power Association (UPA), indicated that low levels of mercury had been experienced at its waste combustor and lower levels were anticipated in the future. UPA suggested that a four-hour test run was described in Method 29.

36. The MPCA responded that the only purpose behind this rule provision is to ensure meeting the most stringent standard imposed by the EPA. MPCA Reply, at 5-6. Should any waste combustor operator seek a more accurate measurement, the MPCA has no objection. *Id.* at 5. To meet the rule standards, however, the test must be done according to the methodology expressed in the rule. Method 29 states:

2.3.3.1 A nominal one hour sampling run will collect a stack gas sampling volume of about 1.25 m³. If the sampling time is increased to four hours and 5 m³ are collected, the in-stack method detection limits would be improved by a factor of four compared to the values in Table 29-1.

The MPCA noted the foregoing language and pointed out that the immediately preceding language states that (for mercury) increasing the aliquot size to 10 ml will increase the detection limit by a factor of 10. MPCA Comment, at 10. Neither of these suggestions are required to meet the federal standard. The suggestions appear to be offered as a means to use Method 29 to determine emission levels for other purposes than meeting the federal emission standards. Where the EPA has determined specific run times are needed, the federal rules have set those standards. See 40 C.F.R. 60.58a(d)(1)(four hour test run for Method 23); 40 C.F.R. 60.58a(f)(2)(one hour sampling time for Method 26). No minimum sample time has been identified for Method 29 in the federal rules. The subpart is needed and reasonable, as modified. The new language does not render the rule substantially different from the rule as originally published.

7011.1270 - Performance Test, Waste Composition Study, and Sampling Frequency

37. Minn. R. 7011.1270 imposes the schedules waste combustor operators must adhere to in conducting the testing required throughout these rules. The testing schedules consistently use the language “annually . . . but not less than twelve months following [the previous test].” UPA objects to the impact of this rule language as “‘ratcheting’ of the testing date.” UPA Comment, at 1. Due to the time required for testing and the need to avoid “downtime”, UPA suggests this language will in fact establish testing every eleven to eleven and one-half months. UPA also suggested stack tests are more difficult during the winter months. The MPCA responded that, in its experience, stack testing is done during the winter months with “satisfactory results.” MPCA Reply, at 5. Requiring testing be done that might fall in the winter months is not unreasonable. There is no restriction on the MPCA requiring testing at intervals slightly less than annually. The obvious alternative, to require such testing once every calendar year, would allow waste combustor operators to schedule testing twenty-three months apart. That schedule would violate 40 C.F.R. 60.38b(a) and 60.58b(d)(2)(ix) which require annual testing for Class A combustors. SONAR, at 67. To be consistent with the more stringent federal requirements, the MPCA language is needed and reasonable.

7011.1280 - Operator Certification

38. The specific standards which must be met by persons seeking operator certification are set out in Minn. R. 7011.1280. The MPCA has modified subpart 1 of the proposed rule to reference the current ASME standard and add control room operators as persons to be certified. The MPCA also added a subpart 11, which would require facilities to maintain a record of persons who have completed the appropriate EPA or MPCA training course with documentation of such completion. The rule, as modified, is needed and reasonable. The new language is not substantially different from the rules as published.

7011.1285 - Operating Records and Reports

39. The records that must be maintained and reports that must be completed by the facility are identified in Minn. R. 7011.1285. Subpart 1.N. was added by the MPCA to require reasons for a facilities’ failure to comply with mercury, dioxin, or furan additive feed rates and whatever action was taken to correct the problem. The MPCA explained that such reporting was considered by the EPA to be separate from other similar problems already reflected in other rule language. MPCA Reply, at 3-4. The new language is needed and reasonable. The modifications do not render the rule substantially different from the rule, as originally proposed.

Adequacy of Supervision During Monitoring

40. Earth Protector objected to the MPCA’s practice of relying upon certified consultants to perform the testing required for certain emissions. T. at 28. To ensure reliability of test results, Earth Protector suggested that an MPCA staff member personally observe the testing to ensure that “optimum conditions” for unusually low

emissions were not being artificially created. *Id.* The MPCA indicated that the testing was required to be done under the combustor's maximum allowable operating load and that this requirement ensured the test would be representative. MPCA Comment, at 6. The agency indicated that it was not aware of any cases where emissions had been artificially manipulated during testing. The certification process used by the MPCA has not been shown to result in unreliable results. There is no defect in the proposed rule by not requiring agency supervision of the testing process.

Adequacy of Monitoring

41. Earth Protector objected to limiting the monitoring required by the MPCA to the emissions *sources* of waste combustors. T. 25-33. Earth Protector desired data on *receptors* in order to assess the effects of waste combustion on particular aspects of the environment and human health. The MPCA responded by submitting the results of *ambient* air monitoring done between 1986 and 1989. MPCA Comment, References 1 and 2. MRRA suggested that any health issues be incorporated into the health risk values (HRVs) for airborne toxic under development by the Minnesota Department of Health (MDOH). T. 41. The MPCA has concluded that the best use of resources is to measure the stack emissions of waste combustors. MPCA Comment, at 4. Should MDOH decide to use HRVs in regulating human health effects, the MPCA indicated that those standards may be incorporated into the permitting process for waste combustors. *Id.* The proposed rules are directed toward controlling emissions from waste combustors and preventing the emissions of harmful substances at levels known to be harmful. The monitoring philosophy taken by the MPCA is needed and reasonable.

Minnesota Environment Audit Pilot Project

42. EPA noted that "the Minnesota Environmental Audit Pilot Program [MEAPP] may impact the approvability of these rule changes." EPA Comment, at 3. There is no reference to MEAPP in the rules proposed. The MPCA responded that any such concern must "be addressed in the legislative forum, not through this rulemaking." The MPCA is correct. While the MPCA is seeking federal approval of the state implementation plan, that fact does not authorize the agency to overturn legislation through rulemaking.

Based on the foregoing Findings of Fact, the Administrative Law Judge makes the following:

CONCLUSIONS

1. The Minnesota Pollution Control Agency gave proper notice in this matter.
2. The MPCA has fulfilled the procedural requirements of Minn. Stat. § 14.14, and all other procedural requirements of law or rule.

3. The MPCA has demonstrated its statutory authority to adopt the proposed rules, and has fulfilled all other substantive requirements of law or rule within the meaning of Minn. Stat §§ 14.05, subd. 1, 14.15, subd. 3, and 14.50 (i) and (ii).

4. The MPCA has demonstrated the need for and reasonableness of the proposed rules by an affirmative presentation of facts in the record within the meaning of Minn. Stat. §§ 14.14, subd. 4 and 14.50 (iii).

5. The additions and amendments to the proposed rules which were suggested by the MPCA after publication of the proposed amended rules in the State Register do not result in rules which are substantially different from the proposed amended rules as published in the State Register within the meaning of Minnesota Stat. §§ 14.05, subd. 2 and 14.15, subd. 3.

6. Any Findings which properly be termed Conclusions and any Conclusions which might properly be termed Findings are hereby adopted as such.

7. A Finding or Conclusion of need and reasonableness in regard to any particular rule subsection does not preclude and should not discourage the MPCA from further modification of the proposed rules based upon an examination of the public comments, provided that the rule finally adopted is based upon facts as appearing in this rule hearing record.

Based upon the foregoing Conclusions, the Administrative Law Judge makes the following:

RECOMMENDATION

IT IS HEREBY RECOMMENDED that the proposed amended rules be adopted.

Dated this 17th day of February, 1998.

ALLAN W. KLEIN
Administrative Law Judge

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